

## ROOM AERO TEMPERATURE

Wall mount temperature sensor in low-profile and high airflow enclosure

### FEATURES

- Attractive, streamlined, Room Aero plastic enclosure
- Spring-loaded Quick Connect wire terminals
- High airflow and extremely fast response
- Built-in level for clean installation
- NTC thermistors, RTDs or transmitter available
- Optional insulated backing
- CE & RoHS compliant
- 5 year limited warranty
- Made in the USA



### GENERAL INFORMATION

High quality, injection-molded plastic indoor room temperature sensor. The Tasseron Aero housing is a sleek, low profile enclosure that melts into any space while offering optimal amounts of airflow for fast and accurate readings.

Like most Tasseron products, the temperature Aero is equipped with Quick Connect wire terminals, which offer a tool free wiring and eliminates the need for wire nuts, allowing a faster and more reliable installation, reducing installation costs.

Available measuring elements interface with all control manufacturers. Accurate interchangeable thermistors and RTD's ensure low drift and are guaranteed for the highest reliability. Also available in a 0-10V transmitter option with 5 programmed temperature ranges.

### SPECIFICATIONS

Enclosure:	Injection-molded ABS, UL 94 HB
Cover:	Quick snap, injection-molded ABS
Mounting:	Quick mount bracket system with snap in place to housing. Fits standard single gang box or mounts directly to wall. Built in level for easy accurate installation.
Connection:	AWG 22-16 / 0.35—1.5mm <sup>2</sup> spring-loaded, patent-pending Quick Connect wire terminals
Sensor Element:	Interchangeable NTC thermistor, 2-wire RTD Pt100, Pt1000, 2-wire RTD Ni1000-891, Ni1000-TC5, 2 wire
Sensor Value:	NTC 10K Ohm type 2 @ 25°C / 77°F NTC 10K Ohm type 3 @ 25°C / 77°F NTC 20K Ohm @ 25°C / 77°F NTC 3K Ohm @ 25°C / 77°F

## SPECIFICATIONS CONT.

Sensor Value (cont.):	RTD Pt1000 1000 Ohm @ 0°C / 32°F RTD Pt100 100 Ohm @ 0°C / 32°F RTD Ni1000-891 891 Ohm @ 0°C / 32°F RTD Ni1000-TC5 1000 Ohm @ 0°C / 32°F (Other elements on request)
Accuracy:	NTC thermistor 0...70°C ± 0.2°C / 32...158°F ± 0.36°F Pt100 / Pt1000 Class B IEC751, ± 0.3°C / ± 0.5°F @ 0°C / 32°F Ni1000 DIN 43760, ± 0.5°C / ± 0.9°F @ 0°C / 32°F
Range:	-40...50°C / -40...122°F

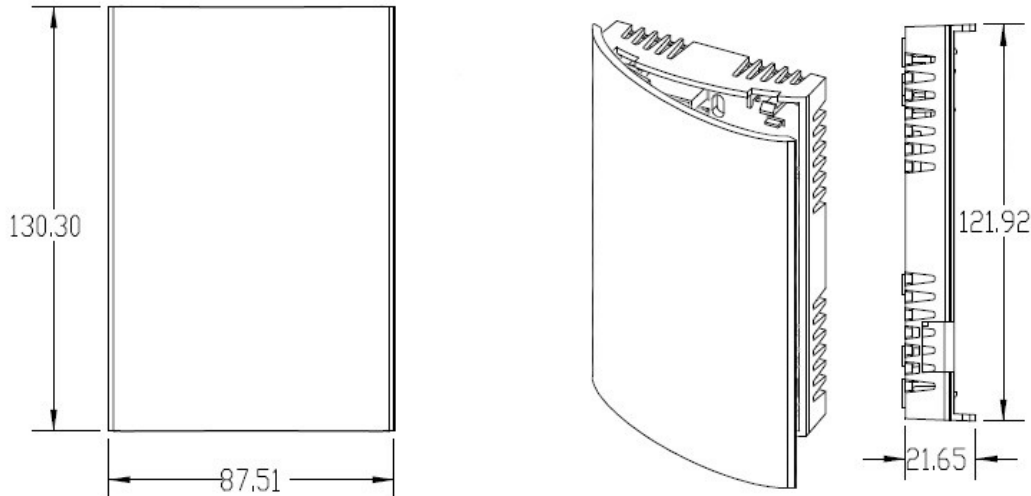
## TEMPERATURE TRANSMITTERS ONLY:

Supply Voltage:	15—35 V DC; 24V AC ±20%
Supply Current:	15mA (not measuring)
Output Current:	0 — 10V
Accuracy:	0.4°C
Connection:	3-pole AWG 30-16 / 0.2 - 1.5mm <sup>2</sup> spring-loaded, 5.1mm Quick Connect wire terminals
Connector:	1—V+ 2—G 3—T

Temp. TR Ranges:	<i>Specified when ordering:</i> Range 1 "X" : -40...+70°C / -40...158°F Range 2 "W" : 0...+50°C / +32...122°F Range 3 "T" : 0...100°C / +32...+212°F Range 4 "U" : +20.7...+48.9°C / +20...+120°F Range 5 "V" : -17.8...37.8°C / 0...+100°F
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Approval:	CE & RoHS compliant
Warranty:	5 year limited warranty
Accessories:	Optional customer logo printed on cover Optional extra added insulated backing

## DIMENSIONS (in mm)



## ORDERING INFORMATION

# HOW TO BUILD A TASSERON ROOM AERO PART NUMBER

Sample Part Number (THTRAA00) —Room Aero sensor with 10k Type 2 element.

T	H	T	R	A	A	00
Tasseron	HVAC	Temp	Room	Aero	Element	Details
					A—10K -2	00- non insulated
					B—10K -3	
					C—20K	0I-insulated back
					D—3K	
					E—Pt1000	
					F—Ni1000-891	
					G—10K-4	
					H— Pt100	
				*Other elements available on request	I—4.7K	
					J—10K-3 (11K)	
					K— Ni1000-TC5	
					<b>Transmitters:</b>	
					T—Range 1	
					32°F... 212°F	
					U—Range 2	
					20°F... 120°F	
					V—Range 3	
					0°F... 100°F	
					W—Range 4	
					0°C... 50°C	
					X—Range 5	
					-40°C... +70°C	

# HVAC temperature measuring elements

## R/T TABLES

Temp		NTC thermistors					RTD elements			
		curve A	curve B	curve G	curve C	curve D	curve E	curve F	curve H	curve K
		NTC 10K type 2	NTC 10K type 3	NTC 10K type 4	NTC 20KOhm	NTC 3KOhm	Pt1000/B	Ni1000-891	Pt100/B	Ni1000-TC5
°C	°F	R (kOhm)	R (kOhm)	R (kOhm)	R (kOhm)	R (kOhm)	R (Ohm)	R (Ohm)	R (Ohm)	R (Ohm)
-40	-40	341.4	242.1	191.9	784.6	97.40	843	697	84.3	831
-35	-31	246.2	181.0	146.6	558.8	71.53	862	719	86.2	851
-30	-22	179.5	136.6	112.9	402.7	52.80	882	743	88.2	872
-25	-13	132.2	103.9	87.59	293.6	39.16	902	766	90.2	893
-20	-4	98.34	79.64	68.47	216.3	29.24	922	790	92.2	914
-15	5	73.73	61.54	53.91	160.7	22.04	941	815	94.1	935
-10	14	55.78	47.91	42.74	120.5	16.74	961	839	96.1	956
-5	23	42.59	37.57	34.11	91.07	12.79	980	864	98.0	978
0	32	32.82	29.66	27.40	69.40	9.856	1000	891	100.0	1000
5	41	25.52	23.57	22.14	53.33	7.663	1020	916	102.0	1022
10	50	19.97	18.85	17.99	41.28	5.999	1039	942	103.9	1045
15	59	15.75	15.17	14.72	32.18	4.729	1058	968	105.8	1068
20	68	12.51	12.28	12.09	25.28	3.754	1078	994	107.8	1091
25	77	10.00	10.00	10.00	20.00	3.000	1097	1021	109.7	1114
30	86	8.048	8.184	8.308	15.92	2.416	1117	1048	111.7	1138
35	95	6.516	6.735	6.936	12.75	1.957	1136	1075	113.6	1162
40	104	5.306	5.577	5.819	10.27	1.595	1155	1102	115.5	1186
45	113	4.345	4.641	4.904	8.320	1.307	1175	1130	117.5	1210
50	122	3.578	3.877	4.151	6.779	1.076	1194	1158	119.4	1235
55	131	2.962	3.261	3.529	5.556	0.888	1213	1187	121.3	1260
60	140	2.464	2.756	3.012	4.577	0.737	1232	1216	123.2	1285
65	149	2.060	2.340	2.582	3.788	0.616	1252	1245	125.2	1311
70	158	1.730	1.996	2.221	3.150	0.518	1271	1274	127.1	1337
75	167	1.460	1.707	1.918	2.630	0.441	1290	1304	129.0	1364
80	176	1.236	1.466	1.663	2.206	0.377	1309	1334	130.9	1390
85	185	1.051	1.264	1.446	1.857	0.324	1328	1365	132.8	1417
90	194	0.896	1.095	1.262	1.570	0.278	1347	1396	134.7	1444
95	203	0.767	0.952	1.105	1.333	0.239	1366	1427	136.6	1472
100	212	0.659	0.831	0.970	1.136	0.206	1385	1459	138.5	1500
105	221	0.569	0.728	0.855	0.972	0.179	1404	1491	140.4	1528
110	230	0.493	0.640	0.755	0.834	0.156	1423	1524	142.3	1557
115	239	0.428	0.564	0.669	0.719	0.136	1442	1556	144.2	1586
120	248	0.374	0.499	0.594	0.621	0.119	1461	1590	146.1	1615
125	257	0.327	0.443	0.529	0.539	0.105	1479	1623	147.9	1645

\* Other elements on request

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